

CLAIMS:

- 1 1. A method for controlling fungal organism, comprising applying a
2 formulation including a microbial inoculant *Bacillus licheniformis*, strain SB3086
3 having the identifying characteristics of ATCC Strain 55406.
- 1 2. The method of claim 1 wherein the microbial inoculum is in the form of
2 concentrated spores.
- 1 3. The method of claim 1 where the microbial inoculum is in the form of
2 active, vegetative cells.
- 1 4. The method of claim 2, wherein said strain is present as concentrated
2 liquid spores ranging from about 1×10^4 to about 1×10^{12} CFU/ml.
- 3 5. The method of claim 2, wherein said strain is present as concentrated
4 dried spores ranging from about 1×10^5 to about 1×10^{13} CFU/g.
- 1 6. The method of claim 1, applying said formulation which further includes
2 nontoxic amount of a surfactant, a preservative, plant nutrients and optionally a
3 biosupplement.
- 1 7. The method of claim 6, applying said formulation in a form suitable for
2 application to plants, seeds, or vegetative propagules.
- 1 8. The method of claim 7, wherein said strain is present in an amount
2 effective against damage to plants by fungal disease.
- 1 9. The method of claim 8, applying said formulation as a dust, spray, a
2 granule, a powder or a liquid.
- 3 10. The method of claim 9, applying said formulation to the shoot, leaf, seed,
4 vegetative propagules or root.
- 1 11. The method of claim 9, applying said formulation as a soil treatment.
- 2 12. The method of claim 1, wherein said strain is present in an amount
3 effective against fungi, other than plant pathogenic fungi.
- 1 13. The method of Claim 12 wherein said fungi, other than plant pathogenic
2 fungi, is *Aspergillus niger*

1 14. The method of claim 13, applying said formulation as a dust, spray, a
2 granule, a powder or a liquid.

1 15. The method of claim 14, applying said formulation in an amount
2 effective against surface contamination by *Aspergillus niger*.

1 16. A method for enhancing biofungicidal activity of a microbial agent,
2 comprising applying a microorganism capable of producing a fungicidal agent, with
3 a nutrient formulation that enhances biofungicidal activity of said microorganism.

1 17. The method of claim 16, wherein said formulation includes nontoxic
2 amount of a surfactant, a preservative, plant nutrients and optionally a
3 biosupplement.

1 18. The method of claim 16, wherein said nutrient formulation is 710-140
2 without SB3086.